

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 05-206036

(43)Date of publication of application : 13.08.1993

(51)Int.Cl.

H01L 21/205  
// H01L 21/20

(21)Application number : 04-014991

(71)Applicant : RIKAGAKU KENKYUSHO

(22)Date of filing : 30.01.1992

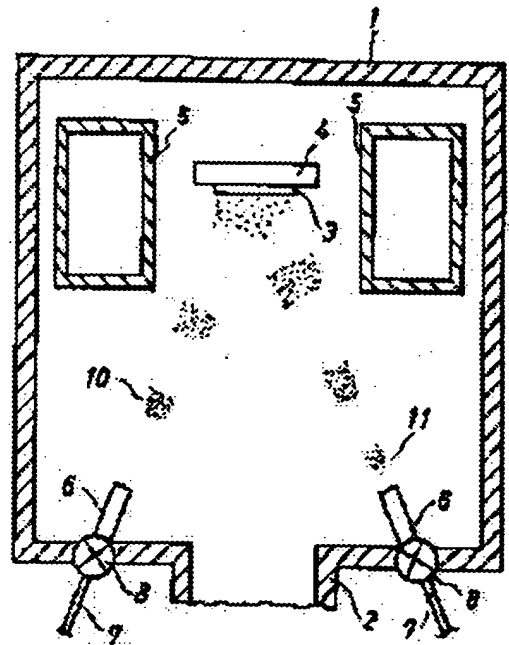
(72)Inventor : AOYANAGI KATSUNOBU  
OZASA KAZUNARI  
MEGURO TAKASHI

## (54) FILM FORMATION METHOD AND FILM FORMATION APPARATUS

### (57)Abstract:

**PURPOSE:** To make it possible to form a thin film having an excellent in-plane uniformity, ALE condition, crystal quality, acute steepness of heterointerface, and others without damaging a substrate.

**CONSTITUTION:** A substrate 3 is arranged in a vacuum chamber 1 which is evacuated at a given degree of vacuum and heated. At the same time, with a gas ejection mechanism having a nozzle 6 arranged toward the substrate 3, and a high-speed switching valve 8 which provided near the nozzle 6, a material gas is ejected to the substrate 3 intermittently or continuously to grow crystals on the surface of the substrate 3 for the formation of a film.



### LEGAL STATUS

[Date of request for examination] 29.01.1999

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number] 3126787

[Date of registration] 02.11.2000

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]